Review
Reviewed Work(s): Atlas of Antebellum Southern Agriculture. by Sam Bowers Hilliard Review by: Fred Bateman
Source: *The Journal of Economic History*, Vol. 46, No. 3 (Sep., 1986), pp. 863-864

Atlas of Antebellum Southern Agriculture. By Sam Bowers Hilliard. Baton Rouge: Louisiana State University Press, 1984. Pp. xi, 77. $27.50 cloth, $8.95 paper.

Working in a world of computer graphics, statistical packages, sophisticated economic methods, and related accountrements of the high-tech era, we sometimes forget the virtues of old, time-tested tools of research or reference. This small volume, Sam Hilliard's *Atlas of Antebellum Southern Agriculture*, is an excellent reminder that a carefully-prepared historical atlas can be a valuable scholarly reference guide. A cultural geographer with historical interests, Hilliard combines his skills as cartographer with those of historian to produce this concise, but reasonably thorough, work. It will prove useful to a wide variety of scholars.

The volume covers six basic topics: the land, climate, population, slavery, livestock, and major and minor field crops. The time covered extends from about 1810 until 1860, but most emphasis is on the latter portion of the period. The stress on the late antebellum period was largely forced upon the author by his primary data source, the federal censuses. All told, there are 111 dot, choropleth, and isorithmic maps included in the collection, most of which are based on county data.

The accompanying text, though sparse at times, competently supplements the maps.

In the section on land features, for example, the author includes topographic and physiographic charts accompanied by detailed descriptions of each region. Where textual material is minimal, the maps alone adequately present the story on such measures as average farm size, slave holdings, or population density. Those dealing with livestock holdings and crop production by county, although not surprising in content, present the information in a way that statistical tables cannot. That is, of course, the primary contribution of the atlas approach: it translates data into a graphic form that facilitates the reader's ready accessibility of quantitative information. In fact, there is a lesson here for all of us who write in economic history. From a purely presentational standpoint, our work's value to others could often be improved through greater reliance on visual presentation, including detailed cartography as exemplified in this atlas.

Similar maps are available in a variety of other locations, including the published census, but this atlas provides the convenience of agglomeration. Additionally, all maps are drawn to the same scale, providing a degree of visual coordination and correlation not available when consulting disparate sources. My major reservation is that the author did not consult a wide variety of basic sources to complement the census reports. But that is a minor quibble about a collection such as this. For classroom use, this inexpensive atlas would be a convenient supplement to text assignments. For reference in research, students of southern development, of agricultural history, or of demography would find this a handy collection to have on their shelf. Readers will probably find themselves, as I did, discovering something new, especially in the county-based maps, even after repeated examinations of the book.

FRED BATEMAN, *Indiana University*

Review
Reviewed Work(s): Atlas of Antebellum Southern Agriculture by Sam Bowers Hilliard
Review by: Thomas D. Clark
Source: *The Register of the Kentucky Historical Society*, Vol. 84, No. 1 (Winter 1986), pp. 81-82

Atlas of Antebellum Southern Agriculture. By Sam Bowers Hilliard. (Baton Rouge & London: Louisiana State University Press, 1984. Pp. xi, 77. Maps. Cloth, $27.50; Paper, $8.95.)

Historians of the Old South would long ago have profited mightily from the preparation of a definitive atlas of regional agriculture. Had such a work been available in that era of a reawakening of historical interest in the region after 1920, many scholars would not have blundered in their general statements about the role of agriculture in the expansion of the South. Sam Bowers Hilliard has presented compactly a statistical and graphic projection of the developing region which not only gives a residual sense of natural environmental influences and production, but also shows the increasing density of both the general and slave population between 1790 and 1860. The population maps, based upon census data, give a pulsating sense of human movement across the frontier South. Clearly defined are the two great funnels that poured emigrants into the region from Virginia and the Carolinas across Georgia into the opening cotton lands of the Old Southwest, and after 1840 the increased human movement from the Ohio and upper Mississippi valleys.

The "dotted" population maps indicate the location of human expansion, and the density maps reflect the facts that the Old South to 1860 was unevenly developing and that it was sharply regionalized. Superimposed upon the general population maps are those which show the spread of slavery after 1800. These maps indicate that the growing density of slavery paralleled that of the widening of the cotton belt. Too, the location of slavery reveals how sectionalized socially the region was in 1860. The density map for slavery in 1860 graphically reveals a sharply regionalized and socially divided region.

No doubt the maps and graphs devoted to the agricultural productivity of the Old South are the ones that will bring about the most serious reassessment of southern economic history. Again these reveal how unevenly developed the region was, especially those which depict the exploitation of farm lands as the size of farms, percentage of area under cultivation, and average value. Despite the great historical emphasis on the plantation, the South in 1860 was basically a land of small farmers.

This reviewer believes that a comparable investigation of county deed books would sustain even more dependably this fact.

Professor Hilliard asserts that cattle were distributed fairly evenly over the Old South and that in the press of westward expansion the southwestern cattle frontier merged in Texas with that moving northward out of Mexico. The only concentrations of sheep and swine were in central Kentucky and Tennessee; like cattle, hogs were produced in greater numbers all across the South in the latter years. This was also true of horse and mule numbers. Clearly, the mule and the work oxen were the Old South's draft animal mainstays.

In the areas of crop production, corn, for the region as a whole, was a mainstay crop. Among the commercial staples, cotton production was heavily concentrated in the river bottom black belts of Georgia, Alabama, Tennessee, and Mississippi, and the Mississippi River delta lands. Rice, tobacco, and sugar cane were more restricted to specialized areas.

The author has used the dot system to denote both population and agricultural distributions placed on standardized county and regional map forms which permitted him a high degree of locational and comparative data concentration. William J. Cooper, Jr., declares in a foreword: "Sam B. Hilliard personifies an almost perfect marriage between geography and history." More than that, the data spread across the faces of the maps of the Old South down to 1860 reveal a vibrant sense of movement difficult if not impossible to capture in the writing of narrative history. This concise atlas of the early agricultural South will give future students of regional history a perspective denied to their predecessors.

Thomas D. Clark

Emeritus professor of history at the University of Kentucky and at Indiana University, Dr. Clark is the author of numerous works on Kentucky and the American South.

Review
Reviewed Work(s): Atlas of Antebellum Southern Agriculture by Sam Bowers Hilliard
Review by: Walter E. Martin
Source: *Southeastern Geographer*, Vol. 25, No. 2 (November, 1985), pp. 155-158

Atlas of Antebellum Southern Agriculture. *Sam Bowers Hilliard.* Baton Rouge: Louisiana State University Press, 1984. xi and 77 pp., maps, diagrams. $27.50 cloth (ISBN 0-8071-1182-1); $8.95 paper (ISBN 0-8071-1202-X)

Few contributions to the study of antebellum southern agriculture should be more welcome than the *Atlas of Antebellum Southern Agriculture*. The lack of maps and/or a disregard for the spatial perspective among the works of many well known scholars of antebellum agriculture have been notable. A few examples would include the following: Paul Gates' *The Farmer's Age: Agriculture 1815–1860* (one pictorial map); John Hebron Moore's *Agriculture in Antebellum Mississippi* (no maps); and Ralph Anderson's UNC dissertation, "Labor Utilization and Productivity, Diversification and Self Sufficiency, Southern Plantations, 1800–1840" (no maps). Lewis Cecil Gray in *History of Agriculture in the Southern United States to 1860* set a somewhat better example by using twenty maps to show the distribution of slaves and the evolving

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Walter E. Martin, Department of Geography and Earth Sciences, University of North Carolina at Charlotte, Charlotte, NC 28223.

production of tobacco and cotton. Sam Hilliard has helped to revive this tradition of spatial analysis with the compilation of 111 historical maps. The niche for this contribution is long standing and well established.

The *Atlas of Antebellum Southern Agriculture* is organized in eight sections. Following a brief introduction the maps are grouped in seven categories: the land, the atmosphere, population, the land and labor system, livestock, major crops, and other crops. The selection of map themes does not stray far from the data sources which include the *United States Census* primarily and some input from the *Atlas of American Agriculture* and the *Climatic Atlas of the United States.* The manipulation of census data to produce "ratios" and "indices" is frequently tempting and occasionally enlightening but Hilliard's prudent selection of more straightforward measures results in a less controversial and more easily interpreted product. Most of the atlas is a cartographic version of the census itself. Dot maps, choropleth maps, and isarithmic maps are all suitably used to depict the pattern, density, and texture of southern agriculture. Pleasant shades of blue and brown combine with high quality semigloss paper to produce an aesthetically attractive work reasonably priced at $8.95 (paper). All maps are the same scale and projection inviting the reader to almost limitless spatial and temporal comparisons.

The introduction briefly places the southern antebellum economy in a national context, provides the reader with a guide to reading and interpreting dot, choropleth, and isarithmic maps, and includes a brief discussion of sources. Section 1, The Land, delimits and discusses the major physiographic regions. The writing style is pleasant and lively enough to help the reader to see the verbal and cartographic portrayals: for example, "The face of the South is a wrinkled one, reflecting the complex of natural forces . . . " The section also includes an invaluable map and description of southern topographic regions. Included in the forty-three "topographic regions" is everyplace from the Alabama Black Belt and the Boston Mountains to the Tennessee Valley and the Western Cross Timbers. Section II, The Atmosphere, provides a handy reference to the general climatic limitations on many agricultural operations. Hilliard does have one caveat for the reader: "The map showing average annual precipitation gives the overall picture, but local conditions and year-to-year variations should be kept in mind." His point is well taken. The interpretation of decennial antebellum agricultural data sets is somewhat weakened by the lack of local climatological records during the production years. The extent to which spatial and temporal crop production patterns were influenced by anomalous weather remains unkown.

Section III, Population, and Section IV, The Land and Labor System, contain a total of forty-four maps. Population growth, density and distribution are portrayed in time series on dot and isarithmic maps. The slave population is handsomely drafted using dot and choropleth maps. The population maps cover the time period 1790–1860. The farm size and farm value series are well selected and produce choropleth maps that highlight the subregional variation in antebellum southern agriculture.

The last three sections of the atlas describe the principal livestock, major crops, and other crops in fifty-seven maps. With the exception of cotton, Hilliard limits his survey to the period 1840–1860. At this scale it is unlikely that uniform production data would be available prior to 1840. Selected for inclusion among livestock are sheep, cattle, swine, horses, mules and oxen. The text that accompanies each section, although brief, frequently provides the reader with insights about the dynamic character of antebellum agriculture. For example in reference to mules Hilliard suggests: "It is presumed that the high numbers found in Kentucky, Tennessee, and Missouri reflect commercial stock bred for sale in the states to the south and west." Also, he is an honest author and cautions the reader: "It is worth noting that the data on livestock probably are inaccurate. For one thing, many animals kept by urban dwellers were omitted from the returns, and there is some question whether yearlings were counted, especially young mule and horse colts."

The reader is provided with similar insights into the production of wheat, corn and cotton. Corn and wheat production are mapped as absolute production (dot maps), production per capita (choropleth maps), and production per square mile (isarithmic maps) for each census year 1840–1860. The emphasis on these crops is well justified owing to their economic and cultural preeminence. Patterns of cotton production are mapped from as early as 1820 and clearly show the development and concentration of production in subregions of the Deep South. The 1860 production of peas and beans, oats, rye, sweet potatoes, Irish potatoes, barley, tobacco, rice, hemp and sugar are mapped in the last section.

The *Atlas of Antebellum Southern Agriculture* makes three highly significant contributions. As a reference for research on antebellum demography, agricultural history or cultural and historical geography it belongs on the bookshelf alongside Lewis Cecil Gray. It is also heuristically powerful. The spatial patterns on each of these 111 maps beckon the reader for explanations. Drawing from both these strengths, its greatest contribution may well be its potential to inspire fresh interest in southern history generally and in the minds of college students especially. This work could serve perfectly as a supplemental text in many college and university courses where southern studies are seriously pursued.

Review
Reviewed Work(s): Atlas of Antebellum Southern Agriculture by Sam Bowers Hilliard Review by: John Herbron Moore
Source: *Agricultural History*, Vol. 60, No. 1, Special Issue on Linkages between Policy, Research, and Small Farmers Conference (Winter, 1986), pp. 89-90

BOOK REVIEWS

Atlas of Antebellum Southern Agriculture. By Sam Bowers Hilliard. Baton Rouge: Louisiana State University Press, 1985, xi, 77 pp., $27.50 and $8.95.

Every agricultural historian of the Old South attempting to utilize the federal censuses has regretted the lack of maps displaying the census data. Some of them, including this reviewer, have been compelled themselves to produce a few of these maps for the areas they were investigating. At long last, however, Sam B. Hilliard, author of the definitive study of food production in the antebellum South, *Hog Meat and Hoe Cake: Food Supply in the Old South, 1800–1860* (1972), and a geographer of note, has filled the void with his *Atlas of Antebellum Southern Agriculture.*

Professor Hilliard defined the area of the Old South as the states of the Confederacy plus the border states of Missouri, Kentucky and Maryland. For convenience in drawing his maps, Hilliard omitted West Texas and South Florida, which he considered to be too thinly populated to be significant. He also chose to disregard Delaware, although that slave state shared many characteristics with Maryland, Virginia, and North Carolina.

Hilliard has skillfully employed three types of maps to display the statistics of the several federal censuses: a dot map to portray distribution and amount, a choropleth map for ratios, and an isorithmic map to show lines of equal value.

Utilizing dot maps in which the appropriate number of dots of a specific value were inserted within the boundaries of the more than one thousand counties in the states of the Old South, Hilliard has vividly portrayed such information as the number of inhabitants in each county and state, as well as the distribution and density of population throughout the region. Sequences of these maps derived from all of the federal censuses revealed the expansion of the settled areas at ten-year intervals. By this means Hilliard chartered the number and distribution of inhabitants, slaves and slaveowners, livestock, and the leading crops of the Old South. His maps of cotton production are particularly valuable for their accurate delineation of the boundries of the Cotton Kingdom for the census years between 1800 and 1860.

Hilliard utilized choropeth maps to show the results of computations derived from the census data. To cite a few examples, he charted county by county the percentage of slaves in the total population, the percentages of slaveowners owning fewer than ten slaves, and the ratios of mules to the total number of draft animals of all kinds. His isorithmic maps conveyed such visual information as the density of population per square mile and the production of various crops per square mile.

The result is a very handsome volume in which thousands of pages of census tables are condensed into somewhat more than one hundred maps with excellent brief explanations. The *Atlas* is certain in future to be one of the most frequently consulted works on the Old South. It will be indispensable for scholars and teachers of Southern history courses, and should be interesting to students at all levels.

John Hebron Moore
Florida State University

Review
Reviewed Work(s): Atlas of Antebellum Southern Agriculture by Sam Bowers Hilliard Review by: John S. Otto
Source: *The Florida Historical Quarterly*, Vol. 64, No. 4 (Apr., 1986), pp. 460-461

Atlas of Antebellum Southern Agriculture. By Sam Bowers Hilliard. (Baton Rouge: Louisiana State University Press, 1985. xi, 77 pp. Foreword, acknowledgments, introduction, maps. $27.50; $8.95 paper.)

Over a decade ago, geographer Sam Hilliard published *Hog Meat and Hoecake: Food Supply in the Old South* (1972), a book which has become a bible to students of southern agriculture. In addition to discussing the agriculture and foodways of the Old South, Hilliard lavishly illustrated *Hog Meat and Hoecake* with a series of maps depicting the production of various cash crops, food crops, and domestic animals in the southern states. Hilliard, however, focused on only eight southern states, overlooking the border states as well as Texas and Florida.

In his latest book, *Atlas of Antebellum Southern Agriculture,* Hilliard broadens his research to include fourteen states of the Old South, excluding only Delaware, western Texas, and southern Florida. Hilliard's *Atlas* contains a brief text, but the heart of the work is a series of 111 elegant maps, portraying southern physiography, climate, population, land and labor systems, livestock, major crops, and minor crops. All are mapped on the same projection and at the same scale to facilitate comparison.

The serious reader will be rewarded by comparing a variety of maps within the *Atlas*. In his introduction, Hilliard urged readers "to make as many visual comparisons" of the maps as possible in order "to 'see' correlations that had hitherto gone unnoticed" (p. 4). As an example, a student could compare maps on major crops, physiographic regions, climate, slave populations, and livestock to find that most southern cotton was grown in the coastal plain below the 210 frostfree day line by slaves using mules as work animals

Despite its potential value for students of southern agriculture, the *Atlas* has some minor flaws. The maps on livestock, for example, fail to demonstrate the importance of stock-raising within certain regions of the Old South. Hilliard included dot maps depicting the areal distribution of hogs and cattle during the census years of 1840, 1850, and 1860. Yet, he failed to include maps portraying the ratios of livestock populations to human populations in the Old South. Such maps would have shown very high livestock to people ratios within the southern mountains and coastal pinewoods. Given their large livestock to people ratios, the mountains and pinewoods habitually produced surpluses of hogs and cattle, which were exported to plantations, cities, and overseas markets.

Although the livestock maps failed to meet the high standards set by the remaining maps, Hilliard's *Atlas* should prove an invaluable research tool for southern historians as well as for specialists in agricultural history. It should become as indispensable as his earlier *Hog Meat and Hoecake*.

Center for American Archeology JOHN S. OTTO
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Review
Reviewed Work(s): Atlas of Antebellum Southern Agriculture by Sam Bowers Hilliard Review by: Alan M. Schroder
Source: *Journal of the Early Republic,* Vol. 5, No. 3 (Autumn, 1985), pp. 410-411

Atlas of Antebellum Southern Agriculture. By Sam Bowers Hilliard. (Baton Rouge: Louisiana State University Press, 1985. Pp. xi, 77. Maps. $27.50; paper, $8.95.)

In this atlas Sam Bowers Hilliard offers a cartographic survey of southern agriculture through an introductory discussion, introductions to each section, and a collection of 111 maps of three types: dot maps, and isorithmic and choropleth maps, which use variations in shading to depict ranges of values. Hilliard begins with a brief but informative tour of southern physiographic and topographic regions and maps of average temperatures and precipitation. This is followed by maps on the size, distribution, and density of the total population, and of the slave population treated separately, by decade from 1790 to 1860. The sources for these and most of the remaining maps are the federal population and agricultural censuses. The agricultural sections include maps on slaveholding in 1860; on the level of improvement, size, and value of farms in 1850 and 1860; and on the density and distribution of livestock holdings (sheep, cattle, swine, horses, mules, and oxen) and the production of the major southern crops—wheat, corn, and cotton—and a variety of minor crops, including tobacco and rice, mainly for 1850 and 1860.

An atlas of this type does have a potential for prompting new scholarly research and stimulating dulled student imaginations. But to earn the reader's confidence both the compiler and the publisher must exercise great care in presenting the material accurately. Unfortunately, this atlas does not appear to have benefited from the required level of care. In the isorithmic maps of population density, for example, the shading level for a density of 40 or more persons per square mile shown in the legend for the 1840 map (though not used on the map itself, even for urban areas) is also used on the 1850 and 1860 maps for a density of 30 or more persons per square mile. This gives a deceptively explosive appearance to the population increase between 1840 and 1850. As a second example, the legend for Map 42, on the "Percent of Slaveholders Owning 50 Slaves or More, 1860," gives shading levels for percentage ranges of 0-1, 1-3, 3-6, and 6 percent and greater, but it also seems to give a shading for a range of 0 percent and less, which is ridiculous. The solution to this incongruity can only be found much later in the book in the legends of a few minor crops, which use this shading for the "None Reported" category. A third example can be found in the large, unexplained asterisks that are scattered about many of the dot maps of livestock holdings and crop production.

The information in the maps may be accurate in other respects, but this lack of care in presenting information in areas the reader can test inevitably raises doubts about the information that he cannot easily test, and it eliminates his confidence in the reliability of the collection as a reference work. He has, as Thoreau said, found a trout in the milk.

Iowa City, Iowa Alan M. Schroder

Review
Reviewed Work(s): Atlas of Antebellum Southern Agriculture by
Sam Bowers Hilliard, William J. Cooper and
Review by: Homer E. Socolofsky
Source: *The Georgia Historical Quarterly*, Vol. 69, No. 3 (Fall,
1985), pp. 400-401

Atlas of Antebellum Southern Agriculture. By Sam Bowers Hilliard. Foreword by William J. Cooper, Jr. (Baton Rouge: Louisiana State University Press, 1985. Pp. xi, 77. Maps, illustrations. $27.50 cloth, $8.95 paper.)

Forty percent of the United States is included in this valuable atlas of pre-Civil War agriculture. The eleven states of the Confederacy, plus the border states of Maryland, Kentucky and Missouri, are studied in this volume, which includes 111 maps, prepared under the guidance of the Alumni Professor of Geography at Louisiana State University.

In 1860 the South had 37 percent of the nation's farms, 38 percent of the people, and 45 percent of the improved land. It contained 99 percent of the slaves, all of the rice, cotton, and sugar produced, as well as 83 percent of the farms of more than five hundred acres and 89 percent of the mules, but only 41 percent of the horses. The maps are organized into broad categories: the land, the atmosphere, population, the land and labor system, livestock, major crops, and other crops. Each category, where feasible, shows changes over time. A narrative, accompanying each map, helps to interpret the visual image found on the map, and related maps conveniently are placed together. The time line for this atlas covers the census years from 1790 through 1860. Three map styles—dot, choropleth, and isorithmic—meet the specific needs of this atlas and all maps, for the benefit of the user, are projected in attractive colors on the same scale. Significant data are provided on a county-wide basis. By 1860 there were more than eleven hundred counties in these fourteen states.

The variety and diversity of southern agriculture are obvious in this work. Cotton was the most important cash crop for a large part of the lower South, but other areas concentrated on "general farming," on tobacco, or on other specialty crops. Corn was the most widespread crop grown in the antebellum South, and cattle were the most evenly distributed livestock.

Interesting comparisons can be made through examining maps for particular years from different categories. For example, a comparison of maps for 1850, such as those for population density, slave population, farmland as a percent of county area, and cotton production, shows a similar dominance of certain areas. Likewise, the map of southern topographic regions shows a direct correlation between population numbers and various components of southern agriculture.

All in all, this atlas will be a valuable resource to all those interested in the Old South. It provides much more than the agriculture of the region. Specific information easily is found. It does not really need an index because entry into this book is provided adequately in a comprehensive table of contents.

HOMER E. SOCOLOFSKY
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Review

Reviewed Work(s): Atlas of Antebellum Southern Agriculture by Sam Bowers Hilliard Review by: Alfred W. Stuart

Source: *The North Carolina Historical Review*, Vol. 62, No. 4 (OCTOBER 1985), pp. 497-498 Published by: North Carolina Office of Archives and History

Stable URL: https://www.jstor.org/stable/23518507
Accessed: 22-09-2024 00:06 UTC

Atlas of Antebellum Southern Agriculture. By Sam Bowers Hilliard. (Baton Rouge: Louisiana State University Press, 1984. Foreword, acknowledgments, introduction, maps. Pp. xi, 77. Paper, $8.95; cloth, $27.50.)

Sam Hilliard's atlas will be a great asset to historians as well as geographers in that it establishes the broader framework in which agriculture developed and depicts the elements of the region's agriculture. Thus, his atlas is in many respects more comprehensive than the title suggests.

The first three sections summarize the nature of the landscape and characteristics of the climate—both of which were fundamental in determining what was possible in terms of agricultural production, especially during a period of somewhat unsophisticated agricultural technology. A brief, jargon-free segment summarizes the natural agricultural potential of 43 topographic regions within the South. The third section shows the spread of population in the region from the first census in 1790 every ten years through 1860.

All of the preceding set the stage for the displays of agricultural patterns that follow in chapter 4. A series of maps provides information such as the percentage of counties that were in farmland, the proportion of improved land, average farm size, proportion of both large and small farms, and value of farmland. Chapter 5 reveals the distribution of many types of livestock in 1850 and 1860, including sheep, cattle, swine, horses, mules, and oxen. Several maps also compare horses, oxen, and mules as a proportion of all draft animals.

The final two chapters depict patterns of major crops—wheat, corn, and of course cotton. Maps portray the absolute level of production as well as production on a per capita and per acre basis. Data on cotton production unfortunately are not available until 1820, but the maps nonetheless give a fascinating display of the rapid intensification of production and its spread southwestward from the Carolinas to the Black Belt of Alabama, the Mississippi Valley, and into eastern Texas. The concept of a "cotton belt" emerges strongly on the 1860 map. Final maps show the 1860 distribution of crops such as peas, beans, oats, other grains, potatoes, tobacco, rice, and sugar.

The maps, which are the essence of this atlas, are clear and well designed. The addition of two or three colors on some enhances their appearance significantly and makes them easier to interpret.

Overall, this is a lucid and crisp presentation of information that is vital to understanding not only the antebellum South but also the strongly agricultural region that survived the war. This book is a useful addition to the reference literature, and it also will make a nice supplemental textbook for courses on both the geography and history of the South.

Alfred W. Stuart

University of North Carolina at Charlotte

Review

Reviewed Work(s): Atlas of Antebellum Southern Agriculture by Sam Bowers Hilliard Review by: Phil Weigand

Source: *Ethnohistory*, Vol. 33, No. 2 (Spring, 1986), pp. 239-240

Atlas of Antebellum Southern Agriculture. By Sam Bowers Hilliard. Foreword by William J. Cooper, Jr. (Baton Rouge: Louisiana State University Press, 1984. xi + 77 pp., 111 maps. $8.95 paper.)

William Cooper, in his foreword to the monograph under review, states: "Maps and the study of history are inseparable" (p. ix). The traditional result has been atlases, and Hilliard's work partly fills an amazing gap; until now, there has never been a historical atlas dedicated to the agriculture of the antebellum Southern United States.

From the Colonial through the Antebellum periods, the South became "the ultimate American region" (p. 1). The region's major characteristics were its tropical crops, its tenure system, and its relatively underdeveloped manufacturing and urban sectors. The distinctiveness of the agricultural sector was reflected in all aspects of the social structure. Despite this particular regionalization, Hilliard's atlas is a strong attempt to illustrate variety and the lack of homogeneity through time over the area. Cash and livestock specializations formed mini-regions within the larger entity: i.e., lower Louisiana's sugar cane; coastal South Carolina's and Georgia's rice; central-north Kentucky's and central Tennessee's swine, horses, and mules; the lower Mississippi Valley's and central Alabama's cotton; and so forth. The purpose of illustrating such diversity is "to challenge the concept of the South as a region but rather to show that a cultural-political region may exhibit striking agricultural variation within its own boundaries" (p. 2).

Three types of maps are used: dot, choropleth (by county and parish), and isorithmic. The drafting and cartography, by Clifford Duplechin and Mary Lee Eggart, is straightforward, uncomplicated, and well-done. Base maps define the landscape in terms of political boundaries, major population centers, physio- and topographic regions, and climatic considerations. Hilliard assumes that we know, or can find out, the names of the states, counties, and parishes; and none of these political units are ever identified on any map. These contemporary administrative units are used as givens, despite the fact that some of them have changed over time. Hilliard contends that this potential for error is unimportant considering the scale utilized in the maps. The dot and isorithmic maps do not show county or parish boundaries at all. When dots are massed on certain population and livestock maps they are almost impossible to read. All maps have longitudinal and latitudinal data. The choropleth maps use shades of brown to illustrate percentile distributions.

After the generalized landscape and climatic maps is the scholarly heart of the atlas: population, labor, livestock, and crop graphics. The demographic data, 1790–1860, are presented as general population concentrations, general population densities, slave concentrations, and slaves as percentages of the total population. The rise of the slave populations in the lower Mississippi Valley and in the "Black Belt" are two of the many interesting patterns illustrated in this chapter. The chapter on the land and labor system uses material from only 1850 and 1860. These choropleth maps illustrate the average number of slaves per household, percentage of slaves held in units of 9 or fewer, percentage of slaveholders owning fewer than 10 slaves and those owning more than 50, farmland as a percentage of county area, improved land as a percentage of all farmland and county area, average farm size, average number of improved acres per farm, farms smaller than 50 acres and larger than 500 acres as percentages of all farms, and average value of farms. A single isorithmic map shows the value of farmland in 1860. Livestock data, 1840–1860 for sheep, swine, and cattle, and 1850–1860 for horses, mules, and oxen, shows each draft animal category in general concentration and as a percentage of all draft animals. The chapters on crops have various starting dates for different cultigens. The crops plotted are: wheat, maize, cotton, pea and bean (together), oat, rye, sweet potato, Irish potato, barley, tobacco, rice, and hemp and sugar (together). Hilliard treats wheat, maize, and cotton as major crops and plots each cultigen using dot, choropleth, and isorithmic maps. These are by far the best series of maps in the atlas. The other crops are plotted by either dot or choropleth maps, and for 1860 only. It is unfortunate that tobacco, rice, and sugar are so treated, for they could well illustrate one of Hilliard's major points: that subregional agricultural and livestock specializations were remarkably prominent and persevering as this ultimate region evolved.

The utilized sources are briefly and incompletely identified in the introduction, but they are not listed in a bibliography nor used in a citation system that would facilitate more detailed agricultural and demographic research. Also, for reasons of scale, south Florida and west and south Texas are excluded from the study. Nonetheless, this atlas is a very good introduction and as such has accomplished its goal. One hopes that Hilliard will soon publish the data and citations that made the atlas possible.

Phil Weigand SUNY, Stony Brook

Atlas of Antebellum Southern Agriculture. Sam Bowers Hilliard. Louisiana State University Press, Baton Rouge. 1984. xi and 77 pp., 22.5 × 30.5 cm, text and maps. Cloth $27.50, paper $8.95.

The *Atlas of Antebellum Southern Agriculture* is an amalgam of text and maps whose purpose is to provide, as the author states, "a visual study over time . . ." of those elements in southern antebellum agriculture that are important for southern studies historians. The principle significance of this work is that it focuses on agricultural variation important to southern agriculture between the years 1790 and 1860. Federal decennial censuses were the sources for all data. Because of its focus, the atlas is unique among other atlases that provide United States historical data (for example, Charles O. Paullin's *Atlas of the Historical Geography of the United States*, which is much broader in scope).

The author has divided the work into seven parts: the land, the atmosphere, population, the land and labor systems, livestock, major crops, and lastly, other crops. Each part begins with a textual backdrop for the maps that follow. The author defines the South as those states ordinarily included, plus the border states of Missouri, Kentucky, and Maryland. Professor Hilliard discusses the importance of map reading and describes the various map types in the introduction. The atlas contains a forward by William J. Cooper, Jr.

Maps in the atlas are two colors (black with blue or brown), or three colors (black, blue, and brown). All the maps are the same scale and are no larger than one-half page. Customarily there are two maps per page, organized for between map comparisons. Four map types are used: political/physical regional base maps (4), dot maps (47), choropleth maps (39), and isarithmic maps (25). There is an attempt to facilitate reader comparison by using constant class boundaries from year to year, for a given variable. On all quantitative maps, a screened blue background is used for water areas, solid blue for coastlines, black for political boundaries, and various shades of brown for thematic data. There are a total of 115 maps.

Other than the introduction, each part begins with a discussion followed by maps selected to describe the topic. For example, in the population section, isarithmic maps of population density are portrayed from 1790-1860, by decades, as well as a dot map for each decade. These are followed by decennial dot maps of slaves and choropleth maps of the slave population as a percentage of total population.

My comments here are suggestions for improvement, and not meant to be mere criticism. This atlas represents a lot of hard work and sacrifice and this dedication should be acknowledged first. There are, however, several errors, by design or oversight, throughout this atlas. Areal symbols appear to have been developed by manually cutting pre-printed art screens and affixing them to the choropleth areas or to the stepped isarithmic surfaces. Numerous cutting errors are evident. Registration is a problem overall (especially maps 53 and 100). Using sensitized films would have led to "crisper" maps.

In several places cartographic slips were made. For example, "isorithmic" was used when "isarithmic" is correct. Professor Hilliard says that "ideally, an isoline connects points of equal value." Isolines do connect points of equal value, by definition. The general discussion of isarithmic mapping needs greater precision, although the technical notes about choropleth and dot mapping are adequate.

There is no one map that contains state names. On three of the isoline maps showing climatic information, the isoline interval is not specified in a legend or note. On two of these maps the isoline interval is not constant. The author uses the method of applying shaded patterns to between-isoline areas, thus creating a stepped-like surface of continuous surface data. Although this method is relatively widely used, it really does not do isarithmic mapping justice.

Professor Hilliard uses the same legend design for both the isarithmic and choropleth maps. This can confuse the reader into believing the choropleth maps contain continuous data, which they do not. A better method would have been to include separate legend boxes each showing precise class boundaries. On several choropleth maps (map 20 and 22, for example), the same area pattern (solid in this case) is used to map different top classes. This tends to weaken the comparative efforts.

In general Professor Hilliard's discussion of dot map methodology is good, but there are two distractions on the maps themselves. The dot size or dot value was not selected carefully. As Hilliard points out, this selection is an aesthetic one, and this reviewer is well aware of the dangers of criticism in matters based on aesthetic appeal. Readers must judge for themselves. Second, new symbols are placed on the dot maps without proper definition. Beginning with map 15, a small circle is added to the dot maps with no clear meaning. This becomes more apparent by map 23 when large circles are included. These are apparently used to symbolize areas of very high density, but are not explained in the map. Finally there is one asterisk-form of symbol that first appears in map 56, with no explanation of its meaning. Overall, the dot maps are not as well done as the choropleth and isarithmic maps.

Although Professor Hilliard has designed this atlas for the professional, I suspect that many students will be reading it. If so, more explanation is warranted. Several terms are not explained, such as "improved land." Professor Hilliard does not indicate why "an important" measurement of agriculture is the scale of operation, or of what importance is per capita production of certain crops. This might have been better explained with a map showing external markets.

Four specific changes that this reviewer would suggest for any future edition of the atlas would be, first, to lighten the color values of all thematic symbols to accommodate the addition of readable base map place names, and second, to define all ambiguous symbols. Another recommendation is that a reference volume of this sort should include a bibliography of map sources and perhaps a list of additional readings. And, finally, as a pedogogic device the atlas would have been better if produced in black and white to facilitate approved-copying for classroom use.

The strength of this atlas lies in its extensive collection of maps, all related to one theme. Certainly having these many maps related to antebellum southern agriculture in one volume is a great find for the researcher. Although there are a few short-comings, as noted in this review, they should not overshadow its strengths as a contribution to the atlas literature. Professor Hilliard will be thanked for such a time-consuming, labor-intensive, and worthwhile project. Undoubtably this atlas will be used by most southern studies experts for years to come.

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Sam B. Hilliard, *Atlas of Southern Antebellum Agriculture* (Baton Rouge: Louisiana State University Press, 1985. Pp. xi + 77. $27·50 and $8·95 softback)

Moderns have regarded space, in the words of Michel Foucault, "as the dead, the fixed, the undialectical, the immobile. Time, on the contrary, was richness, fecundity, life, dialectic." Foucault's dichotomy clarifies a particularly acute problem for historical geographers. Aspatiality abounds in our cognate discipline, though less so among the newer varieties of social and economic history or among the French than in what might be called grand or magisterial American history—the kind that winds up in the columns of the *New York Review of Books*. Spatiality arguably stands in inverse relation to wha historians acknowledge as grand history.

A case in point, and one pertinent to this review, is the lofty but spatially arid debat over the nature of society in the antebellum South. Was its mode of production capitalis to the core or was it quasi-feudalist? In this categorical debate, each side hauls ou examples irrespective of spatial context. The marxists summon Fitzhugh, the capitalist DeBow, and so on for lesser luminaries, ignoring almost always the regional structure that gave rise to diametrical ideologies. It is not, I think, happenstance that on subregion, the upper Old South, spawned the anti-capitalist radicalism of a Georg Fitzhugh, the aristocratic enslaver of whites and blacks if he had had his chance, an Hinton Rowan Helper, the virulent racists who despised slavery for its destructiveness t poor whites (one of whom he had been). Fitzhugh and Helper came from a regio coming apart at the seams—a region of increasing poverty, expansion in the proportio of free blacks, an apparent decay in order, and exacerbated economic competitio among blacks and whites. The chaos of the upper Old South, a hothouse for extrem ideological solutions, contrasted sharply with capitalist ideology nurtured in th booming cotton belt. Its planters, newly rich, avaricious, and totally committed to th market, carried agrarian capitalism to its extreme limits.

That grand history loses sight of such geographical fractures in economy and ideolog is reason enough for a crash-course in southern agricultural geography and the spatia distribution of settlement, crops and livestock. And no one is better-suited for this task than Sam Hilliard, author of a magnificent book on food sufficiency in the antebellum south and a native son with southern soil beneath his nails.

Hilliard's crash course, the *Atlas of Antebellum Southern Agriculture*, is an elementary introduction, and properly so. It consists of 111 maps, mostly of crop and livestock distributions in the three census years of 1840, 1850 and 1860. The maps divide into fou broad groups: ten on physiography and climate; 18 on population and slaves (1790–1860); 15 on plantation attributes (acreage, improved acreage, slave frequency, etc.); an 73 on crop and livestock distribution. Appropriate to the audience, the *Atlas* maps are basic. On a consistent scale of 1 inch to 200 miles (1:12,670,000), they portray cross-sectional univariate distributions with the county as the data unit. Readers interested in agricultural change or crop ensembles are invited to make visual comparisons. The atlas makes use of three varieties of symbolization: point (dot), line (isoline) and area (choropleth). The dot maps are standard, while the isoline and choropleth maps are symbolized with an attractive sepia shading.

Hilliard's text is brief, not more than one-fifth of the volume. Early on, he offers a graceful introduction to the region and gentle advice on map reading and construction. Thereafter, the compressed narrative selectively restates what the maps show. Aside from depriving us of access to the author's rich insights on southern agriculture, the narrative glosses over fairly important crops such as rice, sugar, tobacco or cowpeas, and there is no attempt to integrate crop–livestock systems such as the cotton–corn–swine–mule complex which characterized the cotton belt.

Hilliard lets the maps speak for themselves, and to a degree they do. Regional variations in crops and livestock are readily apparent to the untrained eye. Visual comparisons across space or time are sufficient to prompt hypotheses on agronomic systems or spatial change. These maps should help prevent the worst excesses of aspatial grand history. Yet the unrelieved monotony of elementary maps conveys an impression of condescension toward the reader. Surely the intelligent reader deserves a glimpse at the larger possibilities afforded by cartographic analysis—a glimpse that might have been provided by an occasional map of spatial association or spatial change.

My principal lament, however, is the atlas's ahistorical treatment of the environment. When reliable maps of mid-nineteenth-century temperature and precipitation are available, and when these differ substantially from recent patterns, the atlas's exclusive use of twentieth-century patterns is inexcusable. Cooler and, in the Mississippi Valley and a deltoid extension into Alabama and east Texas, drier weather in the antebellum period, as I argue elsewhere, played a critical role in increasing both the level of transAppalachian agricultural productivity and American economic growth.

The Atlas of Antebellum Southern Agriculture is an important supplement for the American historian. Except for the environment, the volume competently presents the cartographic facts on one of America's most interesting times and places. It may, though I fear not, help alter the modern conception of space as dead, fixed, undialectical and immobile.

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Atlas of Antebellum Southern Agriculture. SAM BOWERS HILLIARD. Baton Rouge: Louisiana State University Press, 1984. xi and 77 pp. and maps. $27.50 cloth (ISBN 0-8071-1182-I); $8.95 paper (ISBN 0-8071-1202-x).

For many years the U. S. South has presented a mystique that has enraptured scholars from a variety of disciplines. The U. S. South for a variety of reasons has been perceived as a homogeneous region by both Southerners and non-Southerners alike. Whereas cultural-political traits have been the most distinctive characteristics of this region, there have been and are marked dissimilarities within its agriculture. Hilliard states that the purpose of this work "is not to challenge the concept of the [antebellum] South as a region but rather to show that a cultural-political region may exhibit striking agricultural variation within its own boundaries." Hilliard's definition of the antebellum U. S. South incorporates those states which comprised the Confederate States of America plus the border states of Delaware, Maryland, Kentucky, Missouri, and present day West Virginia.

The *Atlas* contains 110 maps and one bar graph and is organized in seven thematic sections: "The Land," "The Atmosphere," "Population," "The Land and Labor System," "Livestock," "Major Crops," "and Minor Crops." Each section contains introductory and explanatory text. Of particular importance, especially for those not versed in cartography, is Hilliard's explanation of the characteristics (good and bad) of the types of maps used in the *Atlas:* dot distribution, choropleth, and isorithmic. One of Hilliard's objectives is to present information in visual form for comparative purposes. To accomplish this, he presents most information in at least two map forms, usually by dot distribution and choropleth techniques. All of the maps are of the same scale and projection. With the exception of one strange and unexplained symbol on several dot distribution maps, the symbols and area patterns are clear and appropriate.

The first two sections of the *Atlas* are focused on the physical environment of the South. The ten maps and accompanying text describe physiographic features and regions and climate variations within the South as related to agricultural production of the antebellum period.

Section III is concerned with population distribution. Using dot distribution and isopleth (density) maps, Hilliard traces the spread of population by census year from 1790 through 1860. The distribution of the slave population is depicted via dot distribution maps and as a percent of total population using choropleth maps. Comparison of the maps, as pointed out in the text, shows that the slave population was not distributed similarly to that of the total population. When compared with maps found elsewhere in the *Atlas*, both spatial and temporal relationships of slaves with certain cash crops, especially cotton, tobacco, and sugarcane, become obvious. The visual impact of the maps depicting the land and labor system (Section IV) is that slavery, although found in all parts of the South, was spatially associated with areas having farms larger than 400 acres, of greater than average farm value, and with more than 45 percent of the farmland in improved land.

The remaining three sections depict the distributions of livestock, including draft animals, and crops. Hilliard organizes the section on livestock in a temporal fashion, intermixing dot distribution maps of sheep, swine, and cattle for the years 1840, 1850, and 1860. This inconsistency with other sections, of not placing the thematic maps in sequence, causes the reader problems in comparing maps that deal with the same topic. The maps do convey the significance of livestock, particularly swine, in all areas of the South. The dot distribution maps of draft animals show the ubiquity of the horse while the choropleth maps reveal sub-regional dependence on mules and oxen. A variety of maps and cartographic techniques are used to portray the distributions of wheat, corn, and cotton. By maintaining the same value classes for production per capita and per square mile the reader can visually perceive the shifts, both in area and intensity, of these crops. Subregional differentiation is observed in the maps of other crops such as tobacco, sugarcane, hemp, oats, barley, rye, sweet potato, and Irish potato.

The *Atlas* conveys the message that agricultural variation did exist in the antebellum South and that the region was not homogeneous for plantations and cotton. It is a welcome addition for geographers, historians and others who have interest in the U. S. South. Key Words: *U.S. South, antebellum agriculture, historical atlas.* **W. Theodore Mealor, Jr.**, Memphis State University.